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### **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 26.03.2003 Bulletin 2003/13

(51) Int Cl.7: **A44B 19/34**, A44B 19/42

(43) Date of publication A2: 07.08.2002 Bulletin 2002/32

(21) Application number: 02250680.2

(22) Date of filing: 31.01.2002

(84) Designated Contracting States:

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR Designated Extension States:

AL LT LV MK RO SI

(30) Priority: 31.01.2001 JP 2001023927

(71) Applicant: YKK CORPORATION Chiyoda-ku, Tokyo (JP)

(72) Inventors:

 Tominaga, Yutaka Shimoniikawa-gun, Toyama-ken (JP)

Takizawa, Toshiaki
 Kurobe-shi, Toyama-ken (JP)

(74) Representative:

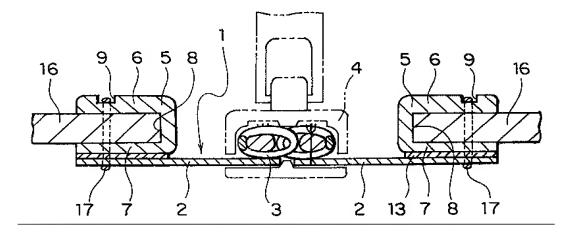
Luckhurst, Anthony Henry William et al MARKS & CLERK, 57-60 Lincoln's Inn Fields London WC2A 3LS (GB)

### (54) Slide fastener and manufaturing method therefor

(57) Both sides of a fastener chain may be reinforced and an attachment object such as a bag or a case may be mounted in a stabilized condition. A reinforcement member (5), which is molded of thermoplastic resin, thermoplastic elastomer or synthetic rubber in the form of a turned-down U shape in its cross section and has an appropriate plasticity and flexibility, is bonded along both outer sides of a fastener chain (1) with a thermal welding resin film (13). The reinforcement member

(5) has a mounting groove (8) which enables a cloth of the attachment object (16) such as the bag or the case to be mounted and further contains a concave groove (9) for a sewing thread, provided in the surface thereof. The cloth of the attachment object (16) is inserted into the mounting groove (8) and sewed along the concave groove (9) with a sewing thread (17). Consequently, the reinforcement member (5) can be mounted simply in a stabilized condition and can ensure a long term use.

# FIG. 3





## **EUROPEAN SEARCH REPORT**

Application Number

EP 02 25 0680

	Citation of description with indication		Delevent	01 4001510 1 500 1 50		
Category	Citation of document with indication of relevant passages	эл, wnere appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)		
х	GB 802 981 A (WILLIAM C CLARKE;AERO ZIP FASTENE KOPPEL) 15 October 1958 * page 1, line 63 - lin figure 1 *		A44B19/34 A44B19/42			
A	* page 2, line 15 - lir	ne 41 *	7,8			
X	US 2 288 105 A (PLOTKIN 30 June 1942 (1942-06-3 * column 1, line 44 - 1 figure 5 *	1				
A	EP 0 875 167 A (YKK COR 4 November 1998 (1998-1 * page 4, line 58 - pag 12; figures 1,2 *	.1-04}	6			
A	US 4 906 310 A (BRODERI 6 March 1990 (1990-03-6 * column 2, line 45 - l figure 1 *	6	TECHNICAL FIELDS SEARCHED (Int.Cl.7)			
A	DE 42 12 209 A (MEIER R 14 October 1993 (1993-1 * claims 12-16; figure	0-14)	6-8	A44B A45C		
A	US 3 925 858 A (THAELER 16 December 1975 (1975- * figures 1,2 *	BRUCE K) 12-16) -	1-5			
	The present search report has been dr	·				
	Place of search	Date of completion of the search		Examiner		
MUNICH		23 January 2003	January 2003 Hor			
X : partic Y : partic doou A : techr	TEGORY OF CITED DOCUMENTS  pularly relevant if taken alone pularly relevant if combined with another ment of the same patagory rological background		iment, but publis the application other reasons	hed on, or		
O : non-written disclosure P : intermediate document			<ul> <li>a: member of the same patent family, corresponding document</li> </ul>			

#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 02 25 0680

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of Information.

23-01-2003

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
GB 802981	Α	15-10-1958	FR	1135659 A	02-05-1957
US 2288105	A	30-06-1942	NONE		
EP 0875167	A	04-11-1998	JP BR CN EP KR	10295418 A 9801976 A 1197725 A .B 0875167 A2 257980 B1	10-11-1998 09-11-1999 04-11-1998 04-11-1998 01-06-2000
JS 4906310	А	06-03-1990	NONE		
DE 4212209	А	14-10-1993	DE	4212209 A1	14-10-1993
JS 3925858	A	16-12-1975	NONE		

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82